

Remarks

Claims 36-59 and 61-64 are pending in the Application.

Claims 36-59 and 61-64 are rejected.

Claims 36, 52, 61 and 62 are amended herein.

Claim 39-40 and 43-44 are cancelled herein.

Claims 36-38, 41-42, 45-59 and 61-64 are pending in the Application after entry of the claim amendments and cancellations cited herein.

I. CLAIM REJECTIONS UNDER 35 U.S.C. § 112, ¶ 2

Examiner has rejected Claims 61 and 62 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Final Office Action, at 2.

Applicant asserts that these claims are not indefinite and a person of ordinary skill in the art would understand the subject matter being claimed. To facilitate prosecution, Applicant has amended both claims so that there is no debate as to the subject matter being claimed and has rewritten them as shown below. Applicant respectfully asserts that these amendments to Claims 61 and 62 are not narrowing amendments made for a reason related to the statutory requirements for a patent that will give rise to prosecution history estoppel. *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831, 1839-40, 62 U.S.P.Q.2d 1705, 1711-12 (2002).

61. (Currently amended) A composition of matter in accordance with claim 45, comprising at least two polymers, wherein a first polymer that coats a first portion of the aggregate of the uncoated single-wall carbon nanotubes is cross-linked with and a second polymer that coats a second portion of the aggregate of the uncoated single-wall carbon nanotubes, wherein the first polymer is cross-linked with the second polymer.

62. (Currently amended) A composition of matter in accordance with claim 45, wherein at least one polymer has a first portion and a second portion, and wherein the a first portion and the second portion of a first the polymer that coats coat the aggregate of the uncoated single-wall carbon nanotubes and, wherein the first portion of the polymer is cross-linked with a the second portion of the first polymer.

Both Claims 61 and 62 are supported in the Application, including in original Claims 61 and 62, as well as the claims from which they each depend.¹ Further support for these claims is also reflected, for example, in the Application at pages 7 and 17 and Figure 2A. Thus, Applicant asserts Claims 61 and 62, as amended herein, distinctly claim the subject matter.

In light of the foregoing, Applicant respectfully requests the Examiner withdraw the rejection of Claims 61 and 62 under 35 U.S.C. § 112 as being indefinite.

II. REJECTIONS UNDER 35 U.S.C. §102(b) AS ANTICIPATED BY DAVEY

Examiner has rejected Claims 36-43, 45-59 and 63 under 35 U.S.C. § 102(b) as anticipated by Davey *et al.*, European Patent EP 0 949 199 (“Davey”) as set forth in Examiner’s Office Action, mailed September 9, 2005 (“the September 9, 2005 Office Action”) and further discussion in the Final Office Action. Final Office Action, at 2.

Applicant has cancelled Claims 39-40 and 43 herein; accordingly the rejections of these claims are now moot.

Regarding rejections under 35 U.S.C. § 102, anticipation requires each and every element of the claim to be found within the cited prior art reference.

Regarding Claim 36, Applicant has cancelled Claim 44 and amended Claim 36 to incorporate the limitations of Claim 44 therein. Claim 36, as amended, is not anticipated by Davey. In fact, the Examiner did not reject Claim 44 as being anticipated by Davey and has presented no basis for such a rejection.

Claims 37-38, 41-42, 45-59 and 63 are directly or indirectly dependent upon amended Claim 36 and are not anticipated by Davey for the same reasons Claim 36, as amended, is not anticipated by Davey.

In light of the foregoing, Applicant respectfully requests that the Examiner withdraw the rejection of Claims 36-38, 41-42, 45-59 and 63 under 35 U.S.C. § 102(b) as being anticipated by

¹ In the Amendment Under 37 C.F.R. § 1.111, mailed December 9, 2005, (the “December 9, 2005 Response”), Applicant indicated that Claim 62 depended from Claim 61. A review of the Claims reflects that this statement was in error. From the inception, both of Claims 61 and 62 depend from dependent Claim 45, which in turn depends from Claim 36.

Davey.

III. REJECTIONS UNDER 35 U.S.C. §102(a) AS ANTICIPATED BY GRIMES

Examiner has rejected Claims 36 and 44 under 35 U.S.C. § 102(a) as anticipated by Grimes, *et al.* “The 500 MHz to 5.50 GHz complex permittivity spectra of single-wall carbon nanotube-loaded polymer composites,” *Chemical Physics Letters*, 319, March 24, 2000, pp. 460-464 (“Grimes”) as set forth in the September 9, 2005 Office Action and further discussion in the Final Office Action. Final Office Action, at 2-3.

As noted above, Claim 44 is hereby cancelled, and Applicant has amended Claim 36 to include the elements of Claim 44.

Applicants respectfully request the Examiner particularly point out which limitations of the above-cited claim limitations are allegedly taught in the passages cited by the Examiner pursuant to 37 C.F.R. §1.104(c)(2).

Applicant notes that in its December 9, 2005 Response (*i.e.*, Applicant’s response to the September 9, 2005 Office Action), Applicant was very specific as to why *Grimes* did not teach the limitations of Claims 36 and 44, which limitations are now found in Claim 36, as amended.

In particular, Applicant expressly pointed out that *Grimes* does not teach any of the polymers required by Claim 36, nor does *Grimes* teach the wrapping of an aggregate of single-wall carbon nanotubes by said polymers. (For this reason alone, Claim 36, as amended, is not and cannot be anticipated by *Grimes*.)

Moreover, Applicant expressly pointed out that the polymer poly(ethyl methacrylate) taught by *Grimes* is a completely different material and has a completely different chemical structure than the polymers specified in the Markush group of Claim 36 (which Markush group was previously drafted in Claim 44). Applicant even discussed in detail Examiner’s contention that the “Grimes article teach[es] the coating of a polymer, particularly poly-ethyl-methacrylate, on a carbon single-wall carbon nanotube,” and that poly-ethyl-methacrylate did not fall within the Markush group of Claim 44 (which is now incorporated in Claim 36). December 9, 2005 Response, at 8-12. The structural differences between the polymers were diagrammed in the response to the September 9, 2005 Office Action.

As Applicant has stated its traversals with specificity, the Examiner is required, including under the M.P.E.P., to address, specifically, such traversals. *See, e.g.*, M.P.E.P. § 707.07(f). Nevertheless, in the Final Office Action, Examiner did not address any of these points raised by Applicant in its December 9, 2005 Response and as re-noted above. Instead, the Examiner merely stated that Applicant's arguments "have been fully considered but they are not persuasive for the reasons set forth above." Final Office Action, at 4. Thus, Examiner has not presented a valid basis for rejecting the Claim 36.

In light of the foregoing, Claim 36, as amended, is not anticipated by *Grimes*. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of Claim 36 under 35 U.S.C. § 102(a) as being anticipated by *Grimes*.

IV. REJECTIONS UNDER 35 U.S.C. §103(a) OVER DAVEY IN VIEW OF EXAMINER'S DISCUSSION

Examiner has rejected Claims 44 and 64 under 35 U.S.C. § 103(a) as being unpatentable over *Davey* as set forth in the September 9, 2005 Office Action and further discussion in the Final Office Action. Final Office Action, at 3.

Applicant has amended Claim 36 and incorporated the elements of Claim 44 into Claim 36. Hence, the arguments in Applicant's December 9, 2005 Response for Claim 44 now encompass Claim 36, as amended. As to Claim 64, this claim depends indirectly from Claim 36. Thus, the arguments in Applicant's December 9, 2005 Response for Claim 44 and 64 now encompass Claim 64.

Again, Applicants respectfully request the Examiner particularly point out which limitations of the above-cited claim limitations are allegedly taught in the passages cited by the Examiner pursuant to 37 C.F.R. §1.104(c)(2).

In its December 9, 2005 Response, Applicant's stated with specificity its basis for traversing Examiner's obviousness rejections. Such bases for traversal included:

To establish a *prima facie* case of obviousness, under 35 U.S.C. § 103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or

to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *See* M.P.E.P. 706.02(j); *see also In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1443 (Fed. Cir. 1991).

Regarding Claim 36, as amended, *Davey* does not teach, disclose, or suggest wrapping an aggregate of single-wall carbon nanotubes with any of the polymers or copolymers required by Claim 36, as amended herein.

Pursuant to the third basic criteria noted above, a *prima facie* showing of obviousness requires the Examiner to provide a motivation or suggestion to combine or modify the prior art reference to make the claimed inventions. M.P.E.P. § 2142. The showings must be clear and particular and supported by objective evidence. *In re Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433-34 (Fed. Cir. 2002); *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000); *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). Broad conclusory statements regarding a reference, standing alone, is not evidence. *Id.* And when an examiner (such as here) relies upon his or her own subjective opinion, this is insufficient to support a *prima facie* case of obviousness. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Consequently, the Examiner's motivation and opinions stated in the September 9, 2005 Office Action and Final Office Action are insufficient to support a *prima facie* case of obviousness for rejecting Claims 44 (now incorporated into amended Claim 36) and 64, the latter of which depends from amended Claim 36. In fact, the Examiner's logic regarding these claims would render all claim limitations regarding chemical composition meaningless for patentability purposes, which is clearly not an accurate statement of the applicable law.

Therefore, as *Davey* does not teach, disclose, or suggest specific polymers and aggregates of single-wall carbon nanotubes, nor the wrapping of aggregates of single-wall carbon nanotubes with any of the polymers required by amended Claim 36, Claim 36, as amended, is not *prima facie* obvious and cannot be obvious over *Davey*. Regarding Claim 64, this claim is dependent upon amended Claim 36 and cannot be obvious over *Davey* for the same reasons amended Claim 36 is not obvious over *Davey*.

In the Final Office Action, Examiner's ignored these bases for traversal raised by Applicant; and, instead, simply reiterated that it found these arguments to be "not persuasive." Final Office Action, at 4. Again, by failing to address these bases raised by Applicant in its December 9, 2005 Response, Examiner has failed to present its *prima facie* case of obviousness. M.P.E.P. § 707.07(f). Moreover, the Examiner's comments suggest a position that Claims 36 and 64 are considered to be obvious even though there is no prior art reference that suggests the specific polymers and copolymers recited in these claims and no motivation whatsoever to use such specific polymers, as required in Claim 36 and its dependent Claim 64. This position is clearly incorrect as a matter of law. *See* M.P.E.P. § 2142 ("the prior art reference (or references when combined) must teach or suggest all of the claim limitations."); M.P.E.P. § 2143.03 ("To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art."); *see also In re Vaeck*, 947 F.2d at 493, 20 U.S.P.Q.2d at 1443; *In re Thrift*, 298 F3d 1357, 63 U.S.P.Q.2d 2002, 2008 (Fed. Cir. 2002).

In light of the foregoing, Applicant respectfully requests that the Examiner withdraw his rejection of amended Claim 36, which incorporates Claim 44, (now cancelled) and 64 under 35 U.S.C. § 103(a) as being unpatentable over *Davey*.

V. OTHER CLAIM AMENDMENT

Claim 52 was amended by inserting the word "the" in the claim before the word "polymer" to make sure that the proper antecedent basis language is utilized.

VI. CONCLUSION

As a result of the foregoing, it is asserted by Applicant that the Claims in the Application are now in a condition for allowance, and respectfully requests allowance of such Claims.

Applicant respectfully requests that the Examiner call Applicant's attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining problems.

ATTORNEY DOCKET NO.
11321-P014US

PATENT

Respectfully submitted,

WINSTEAD SECHREST & MINICK P.C.

Attorneys for Applicant

By: 

Ross Spencer Garsson

Reg. No. 38,150

P.O. Box 50784
1201 Main Street
Dallas, Texas 75250-0784
(512) 370-2870